

DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
WASHINGTON,
(March 27, 1925)

PUBLICATIONS RELATING TO ELECTRIC BATTERIES

The Bureau of Standards has issued the following publications on battery subjects. These may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices indicated. In the tabulation given below the initial letter preceding each number shows the publication series in which it was issued: S for Scientific Papers, T for Technologic Papers, and C for Circulars. Papers marked "Out of Print" are no longer available but may be consulted at the Government depository libraries, several of which have been designated by Congress in each state.

<u>Designation</u>	<u>(a) Dry Cells</u>	<u>Date of issue</u>	<u>Price</u> (cents)
C 79	Electrical characteristics and testing of dry cells (2nd ed.)	Jan.19,1923	15
S 364	Relation of voltage of dry cells to the hydrogen-ion concentration.	Feb.24,1920	5
T 171	Automatic apparatus for intermittent testing	July 22,1920	5
S 434	Electromotive force of cells at low temperatures	April 17,1922	5
C 139	U.S.Government specifications for dry cells.	June 15, 1923	5

(b) Storage Batteries

T 146	Cadmium electrode for storage battery testing	Dec.12, 1919	5
T 149	Estimation of nitrates and nitrites in battery acid	Feb.24, 1920	5
C 92	Operation and care of vehicle-type batteries.	June 7, 1920	30

<u>Designation</u>	<u>Date of issue</u>	<u>Price</u> (cents)
T 186 Instantaneous values of current and voltage in the battery circuit of automobiles	May 3, 1921	10
T 225 Determination of the rate of sulphation of storage battery plates	Dec. 19, 1922	5
S 434 Electromotive force of cells at low temperatures.	Apr. 17, 1922	5
T 271 Electrical resistance and mechanical strength of storage battery separators.	Jan. 9, 1925	10

(c) Rectifiers

T 265 Theory and performance of rectifiers	Oct. 9, 1924	20
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(d) Standard Cells and Potential Measurements

S 67 Preliminary specifications for Clark and Weston Cells (Bulletin Bur. Stds. Vol. 3, page 623).	Aug. 16, 1907	Out of Print
S 70 Clark and Weston standard cells (Bulletin, Bur. of Stds. Vol. 4, page 1).	Sept. 17, 1907	Out of Print
S 71 Electrode equilibrium of the standard cell. (Bulletin, Bur. of Stds. Vol. 4, page 81).	Oct. 4, 1907	Out of Print
S 104 Temperature formula of the Weston standard cell (Bulletin Bur. of Stds. Vol. 5, page 309).	Sept. 3, 1908	Out of Print
C 29 Announcement of a change in the value of the international volt.	Dec. 31, 1910	Out of Print
S 390 Two common failures of the Clark standard cell.	July 21, 1920	5
S 504 Method of studying electrode potentials and polarization	1925 (in press)	

REFERENCES TO BOOKS ON BATTERY SUBJECTS

The Bureau of Standards receives frequent inquiries regarding manufacturing processes and for other information which is not specifically covered in its publications. To meet the needs of such inquirers a very brief list of recent books relating to primary batteries and storage batteries is given below with a brief statement of the scope of the book and the name of the author and publisher.

(a) Primary Batteries

Primary Batteries, by W. R. Cooper, second edition 1917.
D. Van Nostrand Co., 25 Park Place, New York City.
Theory, construction and use of the various forms of primary batteries.

(b) Storage Batteries

Storage Batteries, by G. W. Vinal, 1924. John Wiley & Sons, Inc., 440 Fourth Avenue, New York City.
Describes manufacturing processes, properties of the electrolyte, theory of reactions, operating characteristics and testing. Uses for storage batteries are discussed.

Elements of Storage Batteries, by C. M. Jansky and H. P. Wood, 1923. McGraw-Hill Book Co. Inc., 370 Seventh Ave., New York City.
Elementary discussion of storage batteries including care, maintenance, repair, and applications of batteries.

Battery Service Work (Volume III of Automotive Repair) by J. C. Wright, 1923. John Wiley & Sons, Inc., 440 Fourth Avenue, New York City.
Analyzes eighteen repair jobs and discusses elementary principles of electricity and the behavior of storage batteries including farm lighting plants.

The Automobile Storage Battery, by O. A. Witte, 3rd edition, 1922. American Bureau of Engineering, Inc., Chicago, Illinois. A book for the repairman describing care and repair of batteries, shop equipment and business methods. Refers also to radio and farm lighting batteries.

